



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,276	03/01/2002	Paul Simon Ewers	10541-1200 - V200-0978	3090
29074	7590	09/07/2004	EXAMINER	
VISTEON C/O BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610			ZARROLI, MICHAEL C	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/087,276	<b>Applicant(s)</b> EWERS ET AL.	
	<b>Examiner</b> Michael C. Zarroli	<b>Art Unit</b> 2839	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 10 is/are rejected.
- 7) ☒ Claim(s) 3-5,8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/10/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Rejections have been overcome.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 2 and 10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country, in public use, or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Prokopp et al.

Prokopp discloses a carrier (fig. 1) for holding an electric component having a one or more electrical connection pins (32), comprising a frame (37) for holding the component, a pin guide (19), and a flexible portion (39) connecting the pin guide to the frame (fig. 2), wherein: a) the pin guide has one or more channels (33) there through for receiving said electrical connection pins (fig. 2), the or each channel extending along a connection axis (dashed lines fig. 2); b) the frame has a base (31, 34) for mounting the carrier to a surface that extends transverse to the connection axis (figures 1 & 3); and c) the flexible portion is adapted to flex to allow the pin guide to move parallel to the connection axis (figures 2 & 6 at two headed arrow) when the pin guide is pressed in a direction along the connection axis.

5. Claims 2 and 6 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Prokopp et al.

Prokopp discloses an electronic assembly (fig. 1), comprising a carrier (37) and an electronic module, the electronic module having one or more connection pins (32, 42), and being mounted to the carrier (fig. 2) the carrier having a frame (37), a base (34, 31), and a pin guide (19) attached to the frame by flexible members (39), wherein; a) one or more channels (33) defined through the pin guide perpendicular to a lower surface thereof and along a connection axis (figures 2 or 5 vertical axis), the one or more channels having an entrance and an exit (fig. 2 at dashed lines) and

said electrical connection pins, being received therein; b) the base defining a plane for mounting the carrier to a surface that extends transverse to the connection axis (figures 3, 6 or 10); and c) the flexible members holding the pin guide in a neutral position (e.g. fig. 2), allow the pin guide to move parallel to the connection axis (figures 2 & 5 double headed arrows) when the pin guide is pressed in a direction along the connection axis independently of the electrical connection pins.

Regarding claim 2 Prokopp discloses that the channel exits have a clearance fit with the pin to align the pin in orthogonal transverse directions to the connection axis when said pin protrudes from the exit (figures 2 & 4).

6. Claim 10 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Desso et al.

Desso discloses a circuit board assembly (title), comprising an electronic assembly and a circuit board (4), the electronic assembly being mounted to the circuit board (fig. 4), and the electronic assembly comprising a carrier (fig. 1) and an electronic component having one or more connection pins (8), the electronic component being assembled to the carrier and the carrier comprising a frame (50) for holding the component, a pin guide (34), and a flexible portion (44) connecting the pin guide to the frame (fig. 1), wherein: a) the pin guide has one or more channels (54) therethrough that receive said electrical connection pins (fig. 2), the or each

channel extending along a connection axis (fig. 3 at arrow pointing down); b) the frame has a base (52) for mounting the carrier to a surface that extends transverse to the connection axis (fig. 2 at 52); c) the flexible portion is adapted to flex to allow the pin guide to move parallel to the connection axis when the pin guide is pressed in a direction along the connection axis (figures 2 & 3); and d) the or each connection pin is electronically connected to a matching connection on the circuit board (figures 1 & 4).

***Claim Rejections - 35 USC § 103***

7. All rejections have been overcome.

***Allowable Subject Matter***

8. Claims 3-5, 8-9 and, 11-14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: In combination, the channel with an exit from which the pin protrudes. In combination, the socket mounted on the circuit board and having pin

receptacles in which the shape of the pin guide matches the socket to aid alignment of each pin in its corresponding pin receptacle.

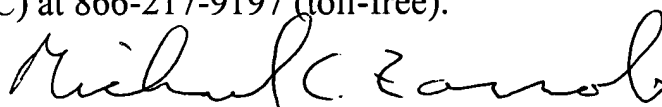
### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Duquerroy et al teaches a carrier for holding an electronic component and a flexible portion.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 571-272-2101. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.C Patel can be reached on (571) 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Zarroli  
Primary Examiner  
Art Unit 2839

MCZ  
MCZ